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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,049	11/13/2001	Yoji Okazaki	Q67279	6352

7590 02/12/2003

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EXAMINER

ABUTAYEH, MOHAMMAD

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,049

Applicant(s)

OKAZAKI ET AL.

Examiner

Mohammad Abutayeh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 6 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 7-16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/8/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 and 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *Detailed Action*.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Aubusson (WO 9012387).

Aubusson discloses, as in Claim 1, a color laser display apparatus (Figure 1) comprising: a laser light source (Figure 1, 11) which emits ultraviolet laser light (Figure 1, 12); a modulation unit (Figure 1, 13) which modulates the ultraviolet laser light; a display unit which includes a fluorescent screen (Figure 1, 18); and a scanning unit (Figure 1, 14-17) which two-dimensionally scans the fluorescent screen with the ultraviolet laser light; the fluorescent screen including for each pixel, red fluorescent material (Figure 1, 18R) which emits red light in response to the ultraviolet laser light, green fluorescent material (Figure 1, 18G) which emits green light in response to the ultraviolet laser light, and blue fluorescent material (Figure 1, 18B) which emits blue light in response to the ultraviolet laser light (Page 3, Line 34 – Page 4, Line 32).

Claim Rejections - 35 USC § 103

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aubusson (WO 9012387).

Aubusson discloses, as in Claim 6, a color laser display apparatus according to Claim 1, wherein, the green fluorescent material is ZnS:Cu and the blue fluorescent material is ZnS:Ag (Page

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8, Line 30 – Page 9, Line 16). Aubusson does not disclose that the red fluorescent material is ZnCdS:Ag, but that is a matter of design choice depending upon the energy level changes of the ultraviolet laser light. It would have been obvious for one skilled in the art at the time the invention was made to use ZnCdS:Ag as the red fluorescent material for the purpose of emitting red light in response to the laser beam.

Allowable Subject Matter

4. Claims 2-5 and 7-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose the limitations of the claims in such a manner that a rejection under 35 USC 102 or 35 USC 103 would be proper. The prior art fails to reveal a color laser display where: the light source is a GaN semiconductor laser as described by Claims 2-4, 7, 11, and 15, the light source is a fiber laser doped with a rare earth element that includes Pr^{3+} as described by Claim 5, laser is modulated by a spatial light modulator driven electromechanically as described by Claim 8-10 and 12-14, or the light source is a plurality of laser sources emitting beams with a predetermined wavelength range that includes ultraviolet as described by Claim 16.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Abutayeh whose telephone number is 703-605-0726. The examiner can normally be reached on Monday thru Friday 8:00 am - 5:00 pm. If attempts to reach

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the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on 703-308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7724 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.



MA

February 6, 2003

Mohammad Abutayeh
Examiner
Art Unit 2873



PATENT EXAMINER/PSA
AU 2873
2-7-03